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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,174	02/14/2002	Paul F. Baude	57322US002	8616
32692	7590	11/05/2003		
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427				
			EXAMINER ESTRADA, MICHELLE	
			ART UNIT 2823	PAPER NUMBER

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/076,174	BAUDE ET AL.	
	Examiner	Art Unit	
	Michelle Estrada	2823	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-83 is/are pending in the application.
 4a) Of the above claim(s) 6-72 and 77-83 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 73-76 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I, the first species (claims 1-7 and 73-76 in Paper filed 9/29/03 is acknowledged.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 5 and 73-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Miyake (5,534,969) and Luo (4,335,161).

Miyake discloses positioning an aperture mask (1) in proximity of a deposition substrate; stretching the aperture mask to align the aperture with the deposition substrate (Col. 8, lines 28-36); wherein stretching the aperture mask comprises stretching the aperture mask into alignment with one or more features on the deposition substrate; wherein the aperture mask is a polymeric aperture mask; wherein the layer on the deposition substrate comprises a layer in an integrated circuit.

Miyake does not disclose depositing material through the stretched aperture mask to form a layer on the deposition substrate.

Luo discloses depositing material through the stretched aperture mask to form a layer on the deposition substrate (Col. 4, lines 33-35 and 49-63 and Col. 10, lines 18-21); depositing material on a deposition substrate through the mask to define a patterned layer on an integrated circuit, wherein the aperture mask includes a patterned area comprising at least a portion of a thin film transistor (Col. 9, lines 64-68).

It would have been within the scope of one of ordinary skill in the art to combine the teachings of Miyake and Luo to enable formation of the deposited material and for the reasons discussed in Luo.

One of ordinary skill in the art would have been led to the recited dimensions and width through routine experimentation to achieve desired device dimensions, associated characteristics and desired device density on the finished wafer. Notwithstanding, it would have been an obvious matter of design choice bounded by well known manufacturing constraints and ascertainable by routine experimentation and optimization to choose these particular dimensions because applicant has not disclosed that the dimensions are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical, and it appears prima facie that the process would possess utility using another dimension. Indeed, it has been held that mere dimensional limitations are prima facie obvious absent a disclosure that the limitations are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical. See, for example, *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955); *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *Gardner v. TEC Systems, Inc.*,

725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984); In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Miyake and Luo as applied to claims 1-5 and 73-75 above, and further in view of Yoneda et al. (2003/0160325).

The combination of Miyake and Luo does not disclose further comprising positioning the aperture mask under the deposition substrate, wherein the stretching the aperture mask reduces sag in the aperture mask.

Yoneda et al. disclose positioning the aperture mask under the deposition substrate, wherein the stretching the aperture mask reduces sag in the aperture mask (Page 6, Paragraph [0072]).

It would have been within the scope of one of ordinary skill in the art to combine the teachings of Miyake, Luo and Yoneda et al. to enable formation of the mask of Miyake and Luo according to the teachings of Yoneda et al.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Miyake and Luo as applied to claims 1-5 and 73-75 above, and further in view of Clark et al. (6,589,382).

The combination of Miyake and Luo does not disclose wherein the layer in the integrated circuit comprises a layer in an organic light emitting diode.

Clark et al. disclose depositing a layer of organic material through a mask to form an organic light emitting diode (Col. 1, lines 15-40).

It would have been within the scope of one of ordinary skill in the art to combine the teachings of Miyake, Luo and Clark et al. to enable formation of the depositing material of Miyake and Luo according to the teachings of Clark et al.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Miyake and Luo as applied to claims 1-5 and 73-75 above, and further in view of Brady et al. (6,259,408).

The combination of Miyake and Luo does not disclose wherein the layer in the integrated circuit comprises a layer in a radio frequency identification circuit.

Brady discloses wherein the layer in the integrated circuit comprises a layer in a radio frequency identification circuit (Col. 3, lines 30-42).

It would have been within the scope of one of ordinary skill in the art to combine the teachings of Miyake, Luo and Brady to enable formation of the depositing material of Miyake and Luo according to the teachings of Brady.

Claim 76 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Miyake and Luo as applied to claims above, and further in view of Simons (5,626,784).

Luo discloses depositing a number of materials on the deposition substrate through a polymeric aperture mask to define an integrated circuit.

The combination of Miyake and Luo does not disclose further comprising sequentially depositing a number of materials on the deposition substrate through a number of repositionable polymeric aperture masks to define an integrated circuit.

Simons discloses sequentially depositing a number of materials on the deposition substrate through a number of repositionable polymeric aperture masks to define an integrated circuit (Col. 5, lines 20-30).

It would have been within the scope of one of ordinary skill in the art to combine the teachings of Miyake, Luo and Simons to enable formation of the mask of Miyake and Luo to be performed according to the teachings of Simons.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Estrada whose telephone number is (703) 308-0729. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on 703-306-2794. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

George Fourson
Primary Examiner
Art Unit 2823


MEstrada
October 29, 2003


W. DAVID COLEMAN
PRIMARY EXAMINER